Applicant Information and Project Summary Form

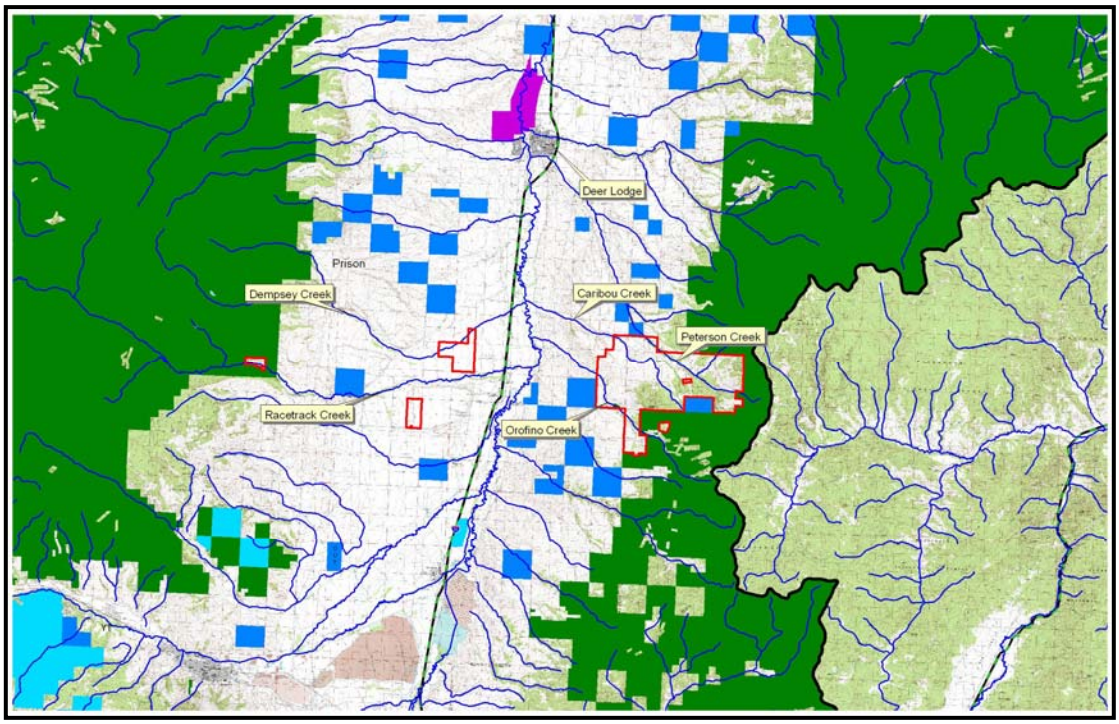
1. **Name of Applicant(s)** Montana Fish, Wildlife & Parks (MFWP)

2. **Project Title** Vanisko Ranch Easement – Planning Grant

3. **Type of Entity*** State Government
(city, corporation, private individual, association, etc.)

4. **Description of Project Location** The Vanisko Ranch is located 8 miles south of Deer Lodge Montana (Figure 1). The upland portion of the ranch, which is the subject of this grant application, encompasses 7021 acres of native grasslands, riparian corridors, and forested uplands. Portions of Peterson, Caribou, and Orofino Creeks traverse the property. Lands within the ranch are legally described as 5 North, 8 West, sections 19 west and 30 north; 6 N, 7 W, sects. 10 and 15; 6 N, 8 W, sects. 1 southeast, 6 south, 7, 8, 9, 12, 13, 16, 17, and 18.

Figure 1. Vanisko Ranch. *(Boundaries of the ranch are in red, subject area east of the river only).*



5. **Injured Natural Resource(s) and/or Impaired Services to be Restored, Rehabilitated, Replaced or Equivalent Acquired through Project** If funded this proposal will initiate a project that will have the capacity to replace and rehabilitate over 7000 acres of important fisheries and wildlife habitat in the heart of the Upper Clark Fork River Basin (UCFRB). We seek a planning grant to fund an appraisal and baseline documentation report (BDR) on the Vanisko Ranch with the ultimate goal of obtaining a conservation easement on the property. The Vanisko Ranch supports a diverse assemblage of habitats, associated species and ecological processes; an easement would protect these lands from potential subdivision, provide public hunting access, and assure that land management on the property is conducted in a manner that is compatible with the long-term ecological integrity of the ranch and Clark Fork watershed. Funds from a planning grant will allow MFWP to obtain an appraisal and gather data, which will facilitate the long-term conservation of the ranch, replacement, and restoration of natural resources.

6. Authorized Representative: Mike Thompson (Name) Wildlife Manager (Title)

Mailing Address: 3201 Spurgin Rd. (Street/PO Box)
Missoula, MT 59804 (City/State/Zip) 406-542-5516 (Telephone)

Contact Person*: Ray Vinkey (Name) Wildlife Biologist (Title)

Mailing Address*: P.O. Box 1066 (Street/PO Box)
Philipsburg, MT 59858 (City/State/Zip)

Phone: 406-859-1704

E-mail Address: rvinkey@mt.gov

7. Proposed Funding Sources

We request funding for an appraisal- $13,500, as well as a baseline documentation report- $6640, a total of $20,140 from the UCFRB Restoration Fund. Montana Fish, Wildlife & Parks will provide 200 hours of staff time at $25/hour- $5000 as well as $300

in travel, and $50 in communication expenses as an in-kind match. Staff will administer the grant, oversee contractors, communicate with landowners, and if appropriate prepare a full Natural Resource Damage Program (NRDP) grant for March 2008.

2007 Application		Amount in ($) Dollars					Matching Fund Percentage (Funding Source Total/Project Total)
Funding Source		Commited Funds			Uncommitted Funds	Total	
		Grants	Non-Grant Funds				
			Cash	In-kind			
A.	UCFRB Restoration Fund	$ 20,140.00				$ 20,140.00	79.01%
B.	Montana FWP			$ 5,350.00		$ 5,350.00	20.99%
C.							
D.							
E.							
F.							
G.							
H.							
I.							
Non-NRDP Totals		$ 20,140.00		$ 5,350.00		$ 5,350.00	**20.99%**

8. Estimated Total Project Cost $25,490.00

(Automatically Calculated from spreadsheet above)

9. Private (non-Governmental) Grant Applicant Financial Information N/A

a. Are there any lawsuits, judgments, or obligations pending for or against you? **No**
b. Have you ever declared bankruptcy? **No**
c. Are any of your tax returns delinquent or under dispute? **No**
d. Any unpaid deficiencies? **No**
e. Are you a party to a lawsuit? **No**
f. Do you have any other contingent liabilities? **No**
g. Do your current and deferred liabilities exceed the value of your assets? **No**

Certification for Individuals or Private Entities N/A

Certification for Individuals or Private Entities N/A

I (We) the undersigned, have provided this financial information as part of my (our) application for a grant from the UCFRB Restoration Fund. I (We) certify that the statement is complete and accurate to the best of my (our) knowledge and I (we) authorize the State of Montana to investigate my credit worthiness and any of the matters described above.

Individual(s)

Name	Social Security No.	Signature	Date
Name	Social Security No.	Signature	Date

Social Security Numbers will be kept confidential.

Private Entities

Name of Authorizing Agent	Federal Tax ID No.	Signature	Date

10. Authorizing Statement

Grant Authorization

I hereby declare that the information included in and all attachments to this application are true, complete, and accurate to the best of my knowledge, and that the proposed project complies with all applicable state, local, and federal laws and regulations.

I further declare that, for Montana Fish, Wildlife & Parks, I am legally authorized to enter into a binding contract with the State of Montana to obtain funding if this application is approved. I understand that the Governor must authorize funding for this project.

Ray Vinkey	July 9, 2007
Project Sponsor	Date
Mike Thompson	Wildlife Manager
Authorized Representative (signature)	Title

Proposal Abstract

Applicant: Montana Fish, Wildlife & Parks

Project Title: Vanisko Ranch Conservation Easement – Planning Grant

Project Description and Benefits to Restoration: Montana Fish, Wildlife & Parks seek planning grant funding from the Upper Clark Fork Basin Restoration Fund to pay for an appraisal of fair market value and a baseline documentation report for 7021 acres of the Vanisko Ranch. Since this is a planning grant the primary benefits of this effort to the basin will result from subsequent actions, which are contingent on approval of the grant. Ultimately the department in cooperation with the landowners, and, we hope, the Natural Resource Damage Program, would like to place a conservation easement on the Vanisko Ranch. The long-term conservation of this large ranch within the watershed will serve to replace and rehabilitate resources and services lost as a result of the operations of ARCO and its predecessors. Easement terms would include a prohibition on subdivision; specific plans for range and forest management, and perpetual public hunting access to the property. The ranch includes portions of three drainages (Peterson, Caribou, and Orofino) in the headwaters of the Clark Fork, multiple springs, native bunchgrass communities, aspen stands, and dry forest communities dominated by Douglas fir and lodge pole pine. Native habitat types on the ranch are likely representative of their historic composition with grasslands transitioning into dry forest communities along an elevational gradient. The Vanisko Ranch borders public lands on three sides and possesses exceptional wildlife habitat. The diversity of habitats on the ranch is reflected in the diversity of species that are present. Few ranches in western Montana provide habitat for antelope, mule deer, white-tailed deer, elk, and moose; the Vanisko Ranch supports these five ungulate species, a genetically pure strain of west slope cutthroat, and numerous other species. Conservation of the Vanisko Ranch will provide lasting benefits to the Upper Clark Fork watershed. We seek a $20,140 grant from the Restoration Fund to explore the opportunity to place a conservation easement on the Vanisko Ranch. An appraisal and a baseline report are necessary prior to final negotiation of an easement. These tasks will be accomplished as soon as funds are available in the fall of 2007. Funding of this planning grant will help Montana Fish, Wildlife & Parks deliver a cornerstone conservation project at the head of the Upper Clark Fork River Basin.

Technical Narrative

Applicant: Montana Fish, Wildlife & Parks

Project Title: Vanisko Ranch Easement – Planning Grant

A. Project Need.

Wildlife and fisheries habitat as well as the recreational opportunities that these resources provide are under threat in western Montana from rapidly expanding residential development. As private ranches and timberlands, which have historically provided ecological and economic benefits to surrounding communities, are converted to residential use the resulting development and fragmentation compromises natural resources. The Deer Lodge Valley remains one of the least developed valleys in western Montana and has been recognized as such by developers and conservationists alike. We have a unique opportunity to use funds from the settlement with ARCO to preserve the social and environmental fabric that makes the valley one of a kind.

Conservation easements are a nationally recognized and established tool to conserve working ranches, open space, wildlife and fisheries habitat, and a public stake in private land management. Montana Fish, Wildlife & Parks holds 37 wildlife easements statewide covering nearly 221,000 acres (as of December 2006, numerous ongoing projects may modify these totals). Within the Upper Clark Fork River Basin, funding and cooperation from NRDP was essential to secure an easement on 4636 acres of the Manley Ranch in 2001.

Jim and Charla Berg are life long residents of the Deer Lodge Valley and owners of the Vanisko Ranch. The Berg's approached the department in 2007 with a desire to enhance the economic viability of the ranch without compromising their cattle operation or the habitat it contains. Like many agricultural producers, the Berg's find it difficult to make ranching pay in an increasingly expensive operating environment. They have had offers from realtors and developers, but their connection to the land and strong environmental ethic have driven them to seek other options than sale of the ranch (or portions of it). Funding from NRDP would allow MFWP to pursue the next critical steps to secure a conservation easement on the Vanisko Ranch.

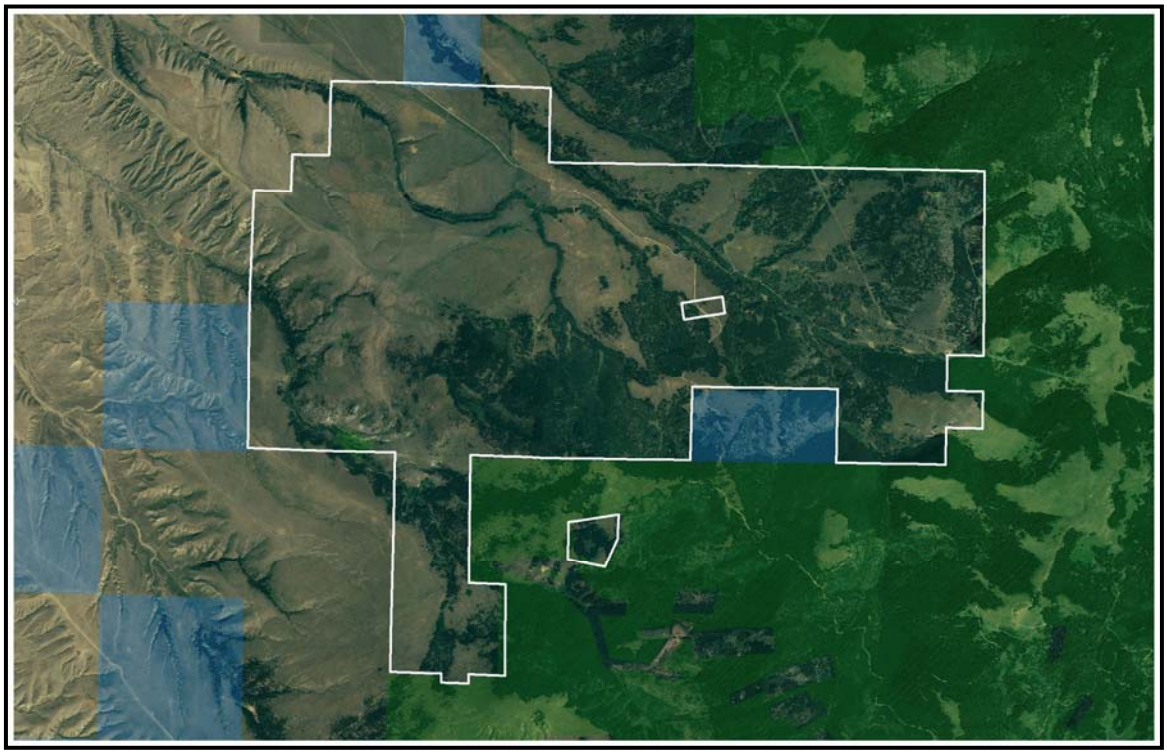
B. Project Goals and Objectives.

The immediate goal of this project is to gather preliminary data about the Vanisko. Ranch- its natural resources, its cultural features, its context in the landscape, and its ecological and economic value. Upon our request the Ecosystem Management Research Institute (EMRI; a non-profit institute), prepared a proposal outlining the components of and cost to prepare a comprehensive baseline documentation report (Appendix A). Data from this report and an appraisal will be used to inform our next decision, whether it is appropriate, advantageous, and feasible to place a conservation easement on the property. Upon completion of this phase of the project the state will have a written appraisal and a baseline documentation report.

B1 and B2. Current Condition and Causes.

MFWP seeks planning grant funds to assess the current condition of the ranch and its causes. Specific biological inventories on the Vanisko Ranch have not been conducted. MFWP has limited data on fisheries and wildlife habitat on the property; a complete dataset will allow the state to assess the value of the property and its potential for restoration. While we know that the full complement of big game native to the area use the property, we do not know what nongame species are present. The general vegetative composition of the property is known (native grasslands, riparian aspen groves, dry forest; Figure 2), but we do not know the specific habitat types, their composition or extent. A baseline report will provide answers to these questions and others necessary to proceed.

Figure 2. Aerial Photo of Vanisko Ranch.



The Vanisko Ranch has sustained timber and cattle production for over a century. Agricultural use has left a footprint on the landscape. The baseline inventory will document this condition and its causes, will structure future phases of this project, and will highlight opportunities.

(Regarding the significant issue of social, demographic and economic shifts in Montana and their impact on natural resources, numerous articles and studies have addressed this topic. The Montana Challenge, a collaborative group of researchers and agencies, has an excellent website http://fwp.mt.gov/tmc with links to numerous reports, datasets, and portraits which explore this subject).

B3. Desired Future Condition.

When completed a baseline report will provide a benchmark documenting the existing condition. With sufficient data on the existing conditions, project partners may move forward with conservation options with a clear understanding of the costs, benefits, and liabilities of a project. The ultimate goal is conservation of key lands at the headwaters of the Upper Clark Fork River Basin. In order to meet this goal MFWP will continue to implement conservation projects in the watershed. MFWP, as the primary steward and manager of fish and wildlife in the state of Montana, is a key cooperator with NRDP. The primary benefit obtained by approval of this short grant is that the partners will be able to proceed with work necessary to explore conservation options with the Bergs. Numerous benefits to natural resources in the basin may result if an easement is obtained on the Vanisko Ranch. An accurate appraisal of the property will help the Berg's, MFWP, and NRDP decide they are interested in granting/funding a conservation easement on the property.

C. Project Implementation Plan.

Montana Fish, Wildlife & Parks seeks NRDP planning grant funds to pay contractors to prepare a baseline report for and property appraisal of the Vanisko Ranch. Since an impartial party is required contractors must provide these services. The property is located in the basin, encompasses important natural resources, and placement of a conservation easement on site is consistent with the goals of the UCFRB Restoration Plan. If planning efforts proceed in a timely fashion and negotiations with the landowners are successful, we will prepare a full grant application to NRDP for consideration in 2008. Ray Vinkey, MFWP's Upper Clark Fork Wildlife Biologist, will be the lead agency contact. Other agency staff, who will provide support and expertise to the project, include Darlene Edge Land Agent, Mike Frisinia Range Coordinator, and Mike Thompson Wildlife Manager. A conservative estimate of their combined hours to administer this project, interact with landowners, and prepare a full grant is 200 hours.

D. Schedule.

Successful implementation of this planning grant will require that the five tasks listed below are completed in a timely manner. This schedule assumes that a grant agreement with NRDP is secured in September 2007. All tasks will be completed by March 15, 2008.

Task	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08
Hire Contractors	X					
Appraisal	X	X				
Baseline Inventory	X	X	X	X	X	
Landowner Contact	X	X	X	X	X	X
Prepare full NRD grant					X	X

E. Methods and Feasibility of the Proposed Project.

Well-established methods exist for conducting appraisals of conservation properties. Market analyses and comparative sales are used to derive an estimate of the value of a property and the cost of placing a conservation easement onsite. The more restrictive the terms of the easement the more expensive they are, access terms in particular can be expensive.

Conservation easements have been used successfully to protect millions of acres of lands throughout the United States. Assistance from NRDP was instrumental in securing a MFWP conservation easement on the Manley Ranch in 2001. There is a strong precedent for cooperation between NRDP to purchase lands and easements for disposition to MFWP. A cooperative effort between Greenway Service District, NRDP, and MFWP resulted in purchase of the Duhame property.

Baseline documentation reports are essential to record the existing condition of a property prior to placement of a conservation easement. Typically data are gathered on land use, wildlife, fisheries, vegetation, range, timber, water, cultural, and anthropogenic features. Standard protocols exist to measure and monitor all of these features. With baseline data it is possible to measure the change in any of these characteristics across time.

MFWP requires a baseline report prior to placement of a conservation easement on a property. Examples include baseline reports for the Gillies and Mannix Brothers Ranch (see section H. for citations). The Ecosystem Management Research Institute has prepared a detailed proposal to complete a baseline documentation report for the Vanisko Ranch for $6,640 (Appendix A). We propose to contract with EMRI to prepare the baseline report. EMRI is a non-profit institute that can provide technical assistance in data compilation and analysis, GIS mapping, photo-documentation, and report preparation. Staff from EMRI are well qualified to complete the project and are eager to apply their skills and experience in the UCFRB. For a detailed explanation of proposed methods see Appendix B.

Implementation of this planning grant will provide essential data to fill information gaps that exist regarding the natural resources, physical condition, cultural features, ecological, and economic value of the Vanisko Ranch.

F. Describe the Monitoring Plan.

Monitoring of this planning grant will consist of monthly progress reports to NRDP and submission of the appraisal and baseline report upon completion. An appropriate measure of success for this planning grant will be the submission of a full grant application in March 2008.

G. Project Team Qualifications.

Montana Fish, Wildlife & Parks staff engaged in the Vanisko project have a depth of experience in wildlife, law, range, land conservation, administration, and management.

Ray Vinkey has worked for MFWP for over three years as the wildlife biologist in the Upper Clark Fork. He completed a M.S. in Wildlife Biology at the University of Montana in 2003 and

has a B.A. from Oberlin College. Prior experience includes wildlife research, natural resource policy, public scoping processes, and project management.

Darlene Edge is a Land Conservation Specialist with the Montana Department of Fish, Wildlife & Parks, and brings 16 years of experience in developing and negotiating complex real estate transactions to conserve Montana's fish and wildlife habitat by fee acquisition or conservation easement. Over the past 16 years Darlene has [directed/accomplished/completed] dozens of land acquisitions and exchanges, including two multiple-agency land exchanges in the Clark Fork drainage that protected the Lost Creek State Park and the Alberton Gorge recreation area.

Mike Frisina has a B.S. and M.S. in Fish and Wildlife Management as well as an honorary doctorate in agriculture from Montana State University. Currently an adjunct professor at MSU in the Animal and Range Sciences program, Mike is a 38-year veteran of MFWP with over half of those years spent as a statewide range coordinator.

Mike Thompson has a B.S. in Wildlife Biology from The University of Montana and M.S. in Fish & Wildlife Management from Montana State University. He has served as project biologist for the completion of 8 conservation easements in his 27 years with MFWP, as well as additional land exchanges and land acquisitions. He is currently Regional Wildlife Manager for MFWP Region 2, in Missoula.

H. Technical Documentation.

Diehl, J. and T.S. Barrett. 1988. The Conservation Easement Handbook – Managing Land Conservation and Historic Preservation Easement Programs. BookCrafters, Virginia.

Haufler, J.B. 2000. Ecosystem Management: from rhetoric to reality. Transactions of the North American Wildlife and Natural Resources Conference 65:11-33.

Lisa Bay Consulting. 1997. Baseline Data Report For Gillies Conservation Easement. Unpublished Report available from MFWP files.

Natural Resource Options, Inc. 1998. Mannix Brothers Ranch – Conservation Easement Baseline Report. Unpublished Report available from MFWP files.

Criteria Statements

Applicant: Montana Fish, Wildlife & Parks

Project Title: Vanisko Ranch Conservation Easement – Planning Grant

1. Relationship of Expected Costs to Expected Benefits

Since this is a planning grant immediate benefits to natural resources, ecosystem services, and people will not be the result. Implementation of this grant will facilitate multiple direct and indirect long-term benefits to the natural resources and residents of the UCFRB. Perpetual public hunting access to the Vanisko Ranch is a substantial and likely benefit if a conservation easement is secured.

The total cost to conduct this project is $25,490, MFWP will provide a 21% match to NRDPs' $20,140. The direct benefit obtained for this cost will be specific and detailed information about the Vanisko Ranch and its resources. These data are pertinent not only to the ranch, but also to the entire watershed. The ranch is representative of other properties at the headwaters of the UCFRB and findings about the Vanisko Ranch will be pertinent to other planning and assessment efforts.

2. Cost Effectiveness.

Four alternatives may be compared to evaluate the cost effectiveness of this project.

Alternative 1. Preferred Alternative. NRDP funds planning grant for Vanisko Easement.

Under the preferred alternative NRDP would fund MFWP to pay for an appraisal of and baseline documentation report for the Vanisko Ranch. This alternative provides the most effective use of time and money; ultimately this alternative is the also most likely to result in the placement of a conservation easement on the ranch. Delays in implementation of this project will result in appreciation of lands under consideration. Land appreciation in western Montana has averaged 10% a year in some locations and prices in the UCFRB are escalating rapidly. The longer it takes it appraise the Vanisko Ranch the higher the price tag will be to place a conservation easement. A $20,140 investment by NRDP in this project now will save substantial funds in the long-term.

Alternative 2. Another party funds appraisal and baseline inventory.

It is feasible for MFWP or a conservation organization to fund an appraisal and baseline report on the ranch. While feasible, it is not necessarily the most cost effective approach. Additional time will elapse before funds are obtained (if they are obtained) and appreciation will occur during this period. Funding of this short grant by NRDP will assure that appraisal and baseline work are conducted consistent with NRDP guidelines; if they are

not than additional time may be spent by state personnel in the future to adapt preliminary work to NRDP standards.

Alternative 3. NRDP funds planning grant for Vanisko Easement at another time.

The NRDP program could table this proposal and fund it at a later date. This option will jeopardize MFWP's goal to obtain lasting protection for the Vanisko Ranch, the natural resources on the property, and their contribution to the overall health of the UCFRB. The longer it takes to implement a project the more costly it is for all parties involved. The landowners may decide to pursue other options, like sale of the ranch, if there are extended delays in implementation. It will not be cost effective for NRDP to defer funding of this grant to another time.

Alternative 4. No Action. An appraisal and baseline inventory are never funded.

Under the No Action Alternative an appraisal and baseline inventory are not funded by any party at any time. The immediate goal is to fund preliminary work on the Vanisko Ranch so that the long-term goal of obtaining a conservation easement on the property will be met. Selection of Alternative 4 will not result in either goal being met. Incorporation of a conservation easement requires an appraisal and usually requires baseline documentation, without either the project will not be completed.

3. Impacts to the Environment, Human Health and Safety.

Funding of and implementation of this planning grant will have no impacts to the environment or to human health and safety. If at a later date a full grant is funded which results in placement of a conservation easement on the Vanisko Ranch there will be numerous benefits to the environment.

4. Public Support.

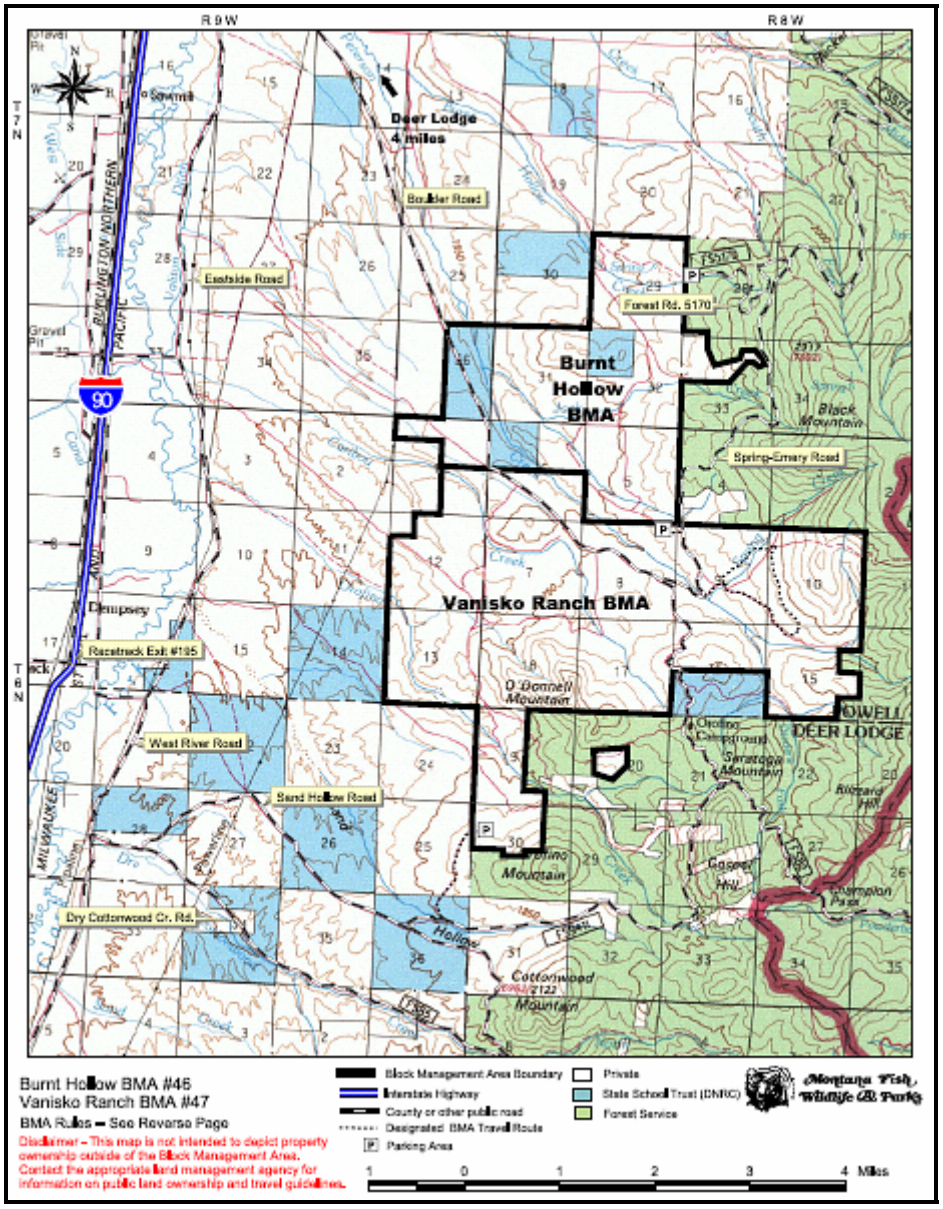
This project is in its preliminary stages and as such has had limited public exposure. Public input into a project in its infancy is premature and may be disadvantageous to early discussions and negotiations with private landowners. Members of the Anaconda Sportsmen's association, staff with Five Valleys Land Trust, American Lands, and the American Land Conservancy are aware of and support this project. Public input will be an important and expected part of the process at later stages. We anticipate that placement of a conservation easement on the Vanisko Ranch (and steps taken to get there) will be positively received. Protection of key wildlife habitat and guaranteed public hunting access are consistent with the values of many local residents.

5. Public Access.

Public hunting access to the Vanisko Ranch is an important component of this project, perpetual access terms will be part of any conservation easement on the ranch. The ranch has been a faithful cooperator in the Block Management Program since its inception. Hunters

may access Forest Service land on three sides of the property as well as Department of Natural Resources property to the south (Figure 3.) From 1998 – 2006, an average of 237 hunters logged 1124 hunter days on the property. Deer, elk, and antelope are harvested on the ranch with notably strong elk harvest (13 elk in 2006). Existing access to the ranch is from two walk in parking areas and a county road.

Figure 3. Vanisko Ranch – Block Management Area.



Appendix A. Proposed Baseline Documentation Report.

PROPOSAL

Easement Documentation Report for the Vanisko Ranch

Submitted To:
Montana Fish, Wildlife and Parks
July 2007

Prepared By:

Ecosystem Management Research Institute
P.O. Box 717
Seeley Lake, MT 59868
406-677-0247
Jon_Haufler@emri.org

INTRODUCTION

A baseline documentation report (BDR) is an integral part of the conservation easement process. It is a record of the condition of the easement area at the time the easement is registered and includes information on wildlife, vegetation, and aquatic resources, as well as other natural features. It also documents existing cultural features and man-made changes to the property.

The Ecosystem Management Research Institute (EMRI), based in Seeley Lake Montana, is a non-profit organization with a mission to provide innovative research, training, and implementation assistance to ecosystem management, biodiversity conservation, and landscape assessment efforts. EMRI has considerable expertise in characterizing and analyzing ecological conditions of areas from small parcels to large landscapes. EMRI has experience in developing BDR's, and is well suited for conducting the work proposed here.

PROPOSED OUTLINE

The following represents the suggested outline and primary content for the BDR:

1. Purpose of the conservation easement:
    a. Landscape context and conservation value of the project area
    b. Objectives of the conservation easement
    c. Purpose of the report
2. Site description:
    a. Location/directions to property
    b. Legal description (reference figures, maps of property, etc.)
    c. Size of property
3. Land use history:
    a. Discuss and describe historical and current land uses, including previous landowners where appropriate.
4. Cultural Features:
    a. Discuss and describe all existing cultural features including structures, fences, utilities (i.e., power lines), and other developments (i.e., man-made ponds).
    b. Provide a map of cultural features
5. Wildlife:
    a. Discuss and describe the importance of property to wildlife as habitat (both year-long or seasonal) or as a linkage zone between habitats or populations.
    b. Discuss any rare animal species that are known to occur in or very near the property or that may use this property as seasonal or temporary habitat
6. Vegetation:
    a. Describe vegetation habitat types and existing cover types.
    b. Describe and discuss exotic plant species occurrences and locations.
    c. Identify rare plants or native communities and discuss their occurrences and locations.
7. Timber Inventory:
    a. Discuss the types of timber present on the property
    b. Describe the results of the timber inventory for the property

8. Aquatic resources:
    a. Describe aquatic resources such as streams, lakes, ponds, or wetlands and their general water quality
9. Summary:
    a. Summarize the conservation easement value of the property
    b. Provide management recommendations where appropriate
10. References
11. Figures and Maps
    a. General map that includes property boundary and vicinity map
    b. Detailed map that includes topo (1/24k), property boundary, and cultural features
    c. Aerial photo with property boundary overlain
    d. Vegetation map
    e. Wildlife features map (i.e., nest sites, linkage zones, etc.)
    f. Other information as appropriate such as weed maps, etc.
12. Appendices:
    a. Supporting documentation
13. Geo-located Photopoints (to document current conditions)
    a. Vegetation or ecological features such as wetlands, exotic weeds, rare plants, etc.
    b. Timber inventory data plot locations
    c. Cultural features
    d. Other appropriate features

Conservation Easement Provisions:

The agency holding the easement will negotiate the conservation easement provisions with the landowner and provide the results to EMRI for inclusion in the baseline documentation report.

PROPOSED APPROACH

EMRI will conduct vegetation, wildlife, timber, and cultural feature surveys during the fall of 2007 and collect geo-located photo-points. The timber inventory will use variable radius plots randomly distributed within a map of forest stands for the property. All survey and inventory information as well as other pertinent data will be incorporated into a Geographic Information System (GIS) for displaying in maps and figures. In addition, the survey information, inventory data, and photo-points will be analyzed and summarized in the BDR using the outline format described in the previous section. If the project can be initiated by October 2007, it can be completed by February 2008. If it cannot be started until later in the fall, then preliminary GIS work and general descriptions can be completed by March, but field sampling would not be possible until May or June, with the final BDR completed by August 2008.

PROPOSED BUDGET

SALARIES

Field Assessment - 56 hours @ $30.00 per hour **$1,680.00**

(Conduct field assessment for rare plants, important wildlife habitat/use, unique features, etc. and document the location, size and type of structures, fences, utilities, roads, etc. Conduct a timber inventory of the property)

GIS Technician - 32 hours @ $50.00 per hour **$1,600.00**

(Prepare maps of property noting vegetation features, structures, roads, utilities, fences, etc.)

Ecologist - 32 hours @ $60.00 per hour **$1,920.00**
(Oversee data collection, prepare final report summarizing field assessment and incorporating conservation easement requirements, maps, etc.)

Total Salaries, including fringe benefits: **$5,200.00**

Indirect Costs- (20% of Salaries): **$1,040.00**

Travel Costs: **$ 400.00**

TOTAL ESTIMATED PROJECT COSTS **$6,640.00**

PROJECT PERSONNEL and QUALIFICATIONS

Carolyn Mehl is an ecosystem/wildlife ecologist with EMRI with particular expertise in ecosystem management projects that target ecosystem restoration and biodiversity conservation. Carolyn will be responsible for providing oversight to the project, directing the field technician, technical expertise in the assessment of forest ecosystems, and preparation of the BDR. Prior to her current position, Carolyn was the Owner/President of Wildlife and Ecosystem Management Associates, Wildlife Ecologist on Boise Cascade's Idaho Ecosystem Management Project, and Wildlife Biologist with the USFWS and EPA, Environmental Management Associates, and the U.S. Army Corps of Engineers. Carolyn has B.S. and M.S. degrees in wildlife management.

Scott Yeats is a wildlife ecologist/GIS analyst with EMRI who will assist with data compilation and analysis and GIS analyses. Scott has worked on a number of similar projects over the past 4 years after completing his B.S. in wildlife biology from The University of Montana.

Appendix B. Methodology Proposed by EMRI to Prepare the Baseline Documentation Report

GIS maps of the property will be prepared. Data sources will include existing GIS information such as topographic maps, county land ownership maps, air photos, hydrology maps, soils maps, and other similar information. Features such as roads, fences, buildings, springs, water developments, will be mapped from existing GIS information, from interpretation of air photos, or from field mapping using GPS. All GPS work will be conducted with hand-held GPS units.

Photographs will be taken of all significant structures, special features, and of representative stands of vegetation. Each photo point will be mapped and a GPS location and compass heading noted.

Invasive weeds will be field-mapped using hand held GPS. Significant patches of weeds will be mapped, if they are present. Scattered occurrences of single weeds or small patches of weeds will not be mapped, but their general presence will be noted and described.

Streams will be described, and any significant features noted, mapped, and if appropriate, photographed. Natural and manmade ponds or other water catchments will be mapped.

Vegetation stands will be initially mapped from air photos. These stands will then be ground-truthed. Where needed, stand boundaries will be field-mapped with GPS. Each stand will be checked for homogeneity of habitat type (Pfister et al., 1977. Forest habitat types of Montana, USFS General Technical Report INT-34) for forest stands, and for ecological site (http://esis.sc.egov.usda.gov/) for grasslands. In addition, each stand will be checked for homogeneity of the existing vegetation. Each type of plant community occurring on each type of habitat type or ecological site will be described. For forest stands, a timber inventory will be conducted. Variable radius plot sampling (Dilworth and Bell, 1977. Variable probability sampling- Variable plot and three-P, OSU Book Stores) will be used to determine existing timber volumes.

Wildlife use of the site will be described based on known information as well as any additional use noted during field mapping and sampling. Information from MFWP will be incorporated as appropriate.

Final maps of the property will display existing structures and improvements, streams and water catchments, vegetation stands, wildlife utilization areas, and other pertinent information. The BDR will present these maps as well as a description of the property. The timber inventory will be summarized in the report. Vegetation conditions will be described including any interpretations of changes that have occurred over time. The importance of the area to fish and wildlife will be described. Photographs will be included, and referenced to a map of their locations.

These methods are fairly standard for preparing BDR's. EMRI has used these methods in preparing BDR's for other properties.